

**FINANCE, CONSTRUCTION, OPERATION AND MAINTENANCE OF
ALTERNATIVE METHODS OF PROCESSING MUNICIPAL SOLID WASTE FOR
THE RAPPAHANNOCK REGIONAL SOLID WASTE MANAGEMENT BOARD**

SCOPE OF WORK

I. BACKGROUND

The Rappahannock Regional Waste Management Board (R-Board) is seeking Proposals from qualified firms for the financing, construction, operation, and maintenance of Alternative processes for the municipal solid waste (MSW) delivered to the landfill in an environmentally sound, economically viable, and socially acceptable manner.

The R-Board provides MSW disposal services for refuse collected from the citizens of Stafford County, Virginia and the City of Fredericksburg, Virginia. The successful proposer shall demonstrate the necessary qualifications, facilities, equipment, staffing, and financial resources to provide an alternative method of disposal without interruption, along with the reliability to provide the required services while meeting the financial and environmental goals of the R-Board. Of particular interest is the demonstration that the process proposed will operate in a manner that protects the health and safety of the public.

The Rappahannock Regional Landfill is located at 489 Eskimo Hill Drive, Stafford, Virginia. The landfill is operated by the R-Board, which is a joint governmental entity of the City of Fredericksburg and Stafford County. While it operates the landfill for the localities, the property on which the Landfill operates is jointly owned by the localities, and consequently this RFP is issued on behalf of the City and County as well as the R-Board. Administrative oversight of R-Board staff is conducted by Stafford County personnel.

The Landfill receives approximately 135,000 tons/year (TPY) of assorted waste, including about 90,000 TPY of municipal solid waste (MSW) delivered via commercial haulers, a drop off facility at the Landfill, and a satellite site off of Belman Road in Fredericksburg. In addition to the quantities of MSW listed above, the landfill receives approximately 1,500 TPY of scrap tires, 7,500 TPY of recycling, along with other debris, appliances, etc. Stafford and Fredericksburg residents choosing to drop off their MSW at either facility are not charged for the service. Revenues are derived mainly from tipping fees paid by commercial haulers, recycle revenues, and other miscellaneous sources. The roughly 800 acre site has been in operation since the late 1980's, and has completed filling of the first five cells. Cell F was completed late in 2012 and is currently in service.

The landfill has sufficient permitted space for between 30 and 50 years operation, depending on future fill rates. Operating rules currently in place restrict the importation of waste from outside the two (2) participating localities. Furthermore, the current condition of Eskimo Hill Road discourages the importation of significant quantities of outside waste. Current traffic counts on this section of Eskimo Hill Road are about 4,000 vehicle trips per day, much of it from current landfill activity.

Water and sewer service at the landfill is very limited. Water is provided from a small service line connected to the County water system. There is minimal capacity for additional service water supply, and no capacity for process use and/or fire protection. Sewer service is currently provided through a grinder pump station at the adjacent animal shelter. This station transfers sanitary waste and landfill leachate to another pumping station near the state detention facility west of the landfill, then transferred from a pumping station there into the County sewer collection system. There is minimal capacity for additional sewer service, and no capacity for process wastewater.

The R-Board has an agreement in effect with Ameresco, Inc., to utilize the methane produced from prior closed cells to power electrical turbines capable of producing just over 2 megawatt electric (MWE). Construction and operation of a proposed alternative facility shall not affect the existing energy producing facility.

The Landfill currently holds an E3 certification (Exemplary Environmental Enterprise) received from the Virginia Environmental Excellence Program. The R-Board desires that construction and operation of this facility will enhance this certification, but in any case, will not jeopardize this certification.

The Landfill has an air permit, solid waste permit, and stormwater pollution permit from the Virginia Department of Environmental Quality. It is expected that these permits will remain in place, but may be altered by the changes in operation resulting from a new facility and process at the site. The R-Board will not allow poor permit compliance from the operation of a new facility to negatively impact the compliance record of the Landfill permits.

In October 2012, the R-Board solicited proposals from firms interested in providing alternative waste to energy services at the Landfill. Three proposals were received in November 2012. Following review, one proposal, was deemed to be substantially more favorable to the R-Board. The R-Board, at the November 14, 2012 meeting, authorized staff to negotiate an Agreement with EEP. This Agreement was executed on April 22, 2013. Among numerous conditions of the initial agreement, Stafford County and the City of Fredericksburg were to consider a 20-year lease of approximately 10 acres at the Landfill for the facility. The Stafford County Board of Supervisors initially approved the lease, but this approval was subsequently rescinded before the lease was executed. Furthermore, the Stafford County Board of Supervisors required that an environmental study be completed before any facility would obtain a lease. The cost of this environmental study must be borne by the successful proposer.

The Agreement is now expired, and the R-Board elected to re-issue the proposal at the September 18, 2013 meeting.

Additional information on the type and quantity of various waste streams, and revenue and expenditure data from the last two fiscal years is included in Appendix A - D.

II. SCOPE OF PROJECT

The R-Board is interested in receiving Proposals from firms that will lease property from the County and City, and to enter in a Contract with the R-Board, whereby the Offeror will build,

own, finance, and operate a facility which would process MSW and other suitable refuse delivered to the landfill and convert the waste stream into a recycled end product. The goal is to reduce the waste stream being directed into the landfill, and convert this into an environmentally safe product(s), suitable for reuse in a safe, cost effective manner. This R-Board does not guarantee the lease or sale of the property, if that is a part of the proposal, and the lease of the property will have to be negotiated with the City and County, who actually own the property, following the award of the proposal.

Eligible technologies, include, but are not limited to, pyrolysis, gasification, anaerobic digestion, composting, or other conversion methods producing a fuel, energy, or other commercially viable product. Because the R-Board currently has a Contract with Ameresco to provide methane gas from the current landfill, which is being used to produce electricity, mining the existing landfill is not an option. The R-Board is interested in Proposals, which would take some or the entire waste stream from the landfill.

III. INFORMATION TO BE SUBMITTED WITH THE PROPOSAL

The Proposals shall provide information outlining the project approach which addresses, but not limited to, the following components:

1. An explanation of the background of the Offeror, including:
 - a. Years in business
 - b. Names of the officers and directors
 - c. Other similar projects in development, construction, or operation
 - d. Financial information to indicate financing plan for construction, and the funding strategy for continued, successful operation
 - e. Any joint ventures, indicate all parties involved with the same information
 - f. Any other contracts with local governments within the United States using this technology.
2. An explanation of the proposed technology that will be used.
 - a. Provide a description of each step in the process
 - b. Provide schematics to illustrate all phases of production
 - c. Provide graphics illustrating the size, layout, key features and general configuration of the proposed facility
 - d. Identify the area required and other features necessary for construction and operation of the facility
3. Schedule for implementation.
4. An estimated projected cost of the facility being constructed.
5. Information regarding the following:
 - a. Source of capital to construct the facility

- b. Funding source to operate the facility during the start-up and operational ramp up until facilities main revenue stream is generated
 - c. Primary and secondary waste streams
 - d. Products and by-products produced, their marketability, revenue potential, and ultimate disposition
 - e. Actions taken to date to secure end markets for these products and by-products
 - f. All projected revenue streams, along with the estimated revenue to be generated from each
- 6. List of local, state, and federal permits needed to begin operation.
- 7. Identify the amount of waste the proposed facility would require each day, along with contingency plans and consequences should that quantity not be available. The R-Board will not guarantee any quantity of waste.
- 8. Length of proposed contract with the R-Board.
- 9. Identify the anticipated noise and odor levels from the operation and how these issues will be addressed.
- 10. Provide a description of the water and sewer service needs for the proposed facility, and discuss how these would be addressed.
- 11. Identify the area required and proposed payment to the R-Board for the lease of the property.
- 12. Identify traffic impacts from the proposed facility and how these would be mitigated.
- 13. Discuss the impacts of the proposed operation on the current revenue stream at the landfill. Include all tipping fees and sales of recycled materials. Identify the disposition of revenues generated by the operation of the facility.
- 14. Identify proposed means to protect the R-Board in the event the facility fails, or the parent company goes out of business, breaches the contract, or otherwise forces the R-Board to resume operation at the Landfill.
- 15. An estimate of how many persons will be employed at the facility, value of the building, value of the machinery and tools in the building.
- 16. Identify all economic benefits such job creation, tax payments, direct and indirect economic stimulus.

17. Environmental impacts from construction and operation. Provide details related to the environmental effects from the proposed facility:
- a. Describe the various permits required to construct and operate the proposed facility.
 - b. Identify the expected environmental impacts from the proposed facility. List the existing operational facilities, testing, reference materials, past studies, etc. used to identify these expected environmental impacts.
 - c. Describe any differences between existing facilities, studies, etc. referenced in b. above and the proposed facility relative to size, feedstock, pollution control devices, and final product. Explain how this has been incorporated into the identification of environmental impacts.
 - d. List the expected contaminants resulting from the proposed process at each stage. Identify which contaminants are expected to be regulated by the Virginia Department of Environmental Quality, and what these limits are expected to be.
 - e. Identify the pollution control equipment, processing, and operational strategies to be incorporated to assure compliance with these expected limits.
 - f. Identify the contaminant potential of the products and byproducts from this operation. Explain how this will be managed from production to ultimate distribution/disposal. Discuss any backup strategies should market conditions result in a disruption of the primary means of disposition.
18. As noted in the Background information provided above, the proposer determined to have provided a proposal deemed to be in the best interests of the R-Board will be required to fund, at the sole expense of the proposer, an environmental study to be conducted by an independent consultant and conducted under the direction of the R-Board. Depending upon the process selected, there is considerable variability in what such a study might entail. This will impact the cost, complexity and duration for the study. The Proposer shall provide the following information:
- a. Describe in general the expected study approach; identify the extent to which the proposer will rely on previous studies and testing, and the extent of new testing specifically tailored for the proposed facility
 - b. Explain how the proposed test protocol for this study will be developed and vetted by concerned parties
 - c. Identify the extent to which the proposer wishes input into the content of the RFP. It is not expected that the proposer will have input into the selection of the independent consultant for the environmental study.
 - d. Requirements for test units for the study, provisions made for the availability of these test facilities, and a statement of understanding that these facilities will be made available along with the necessary waste for testing, and disposal of test products and by-products. This cost will be absorbed by the proposer.

- e. A certification that the proposer, if selected as being the proposer deemed to be in the best interests of the R-Board, will fund an environmental study of their proposed process. Include any conditions relative to this certification.

IV. EVALUATION CRITERIA

The R-Board will use the following criteria, in the priority order listed below, in the review and evaluation of the Proposals:

1. Detailed Assessment of Environmental Risk & Willingness to Fund Further Study
2. Financial Risks to R-Board
3. Financial Rewards to R-Board
4. Project Impacts to Current Operations
5. Capital Investment Level & Funding Strategy
6. Previous Level of Effort Towards Project Development
7. Track Record of Successful Ventures
8. Schedule
9. Completeness, Content & Clarity of Proposal

Note: Elaborate and costly presentations are neither required nor expected. Stafford County will not reimburse a company for the cost of submitting a Proposal. Each response should not exceed one hundred (100) numbered pages (double-sided, not including the Table of Contents, dividers, and any exhibits or appendices).

The R-Board may employ a third party consultant(s) to assist in the evaluation of the proposals, and makes no assertion regarding the length of time it will take to complete evaluation of the proposals.

V. BASIS FOR AWARD

The R-Board will evaluate the proposals and may also ask questions of a clarifying nature from Offerors as required. A composite rating will be developed which indicates the group's collective ranking of the written Proposals in a descending order. The R-Board may engage in individual discussions with two (2) or more Offerors deemed the most fully qualified, responsive, responsible and suitable based on the evaluation criteria listed above. These Offerors may be requested to make an oral presentation to the Selection Committee to explain their Proposal and answer questions.

At the conclusion of discussion, on the basis of evaluation factors as set at the time of issuance of this Proposal and all information developed in the selection process to this point, the R-Board shall select the Offeror deemed most advantageous on the basis of the factors listed above, and the results of the interviews, if applicable. Negotiations shall then be conducted with the Offeror selected. Financial provisions shall be considered, but need not be the sole determining factor. After negotiations have been conducted with the Offeror selected, the R-Board shall make a formal selection of the firm/joint venture with which it intends to pursue alternative methods of waste disposal. The R-Board may then enter into a Contract, Agreement, or other binding

instrument, for the completion of an independent environmental study to assess environmental risks associated with the process selected. Final selection of a preferred proposer by the R-Board, and subsequent action by the County and City with respect to a lease, will be determined after the conclusion of the environmental study; however, there is no guarantee of award regardless of the results of the study.

Should negotiations with the initial preferred proposers be unsuccessful and not result in a mutually satisfactory outcome, the R-Board may then declare an end to negotiations with the first firm/joint venture, and initiate negotiations with the second ranked firm. The process will proceed in a manner similar to that described above, and continue with other proposers until such time as a firm/joint venture is selected, or the R-Board abandons these efforts.

The R-Board reserves the right to accept or reject any or all Proposals received as a result of the request, to negotiate with any qualified firm or to modify or cancel in part or in its entirety the Request for Proposal if it is in the best interest of the R-Board.

Pending completion and review of the independent environmental study referenced above, the R-Board will decide whether to proceed with the project. If the R-Board decides to proceed, it will be necessary to receive approval from the Stafford County Board of Supervisors and the City of Fredericksburg if property on the Landfill site is required. This approval is not assured.

END OF SECTION